# CLAIMS

1. A communication apparatus comprising:

a first radiocommunication means for sending and receiving data to and from a host device via a radiocommunication network;

a second radiocommunication means for sending and receiving data to and from a communication device connected to an external communication network outside the radiocommunication network, via the radiocommunication network;

a storage means for storing communication setting information on the external communication network; and

a communication controlling means for setting a relation of connection to the external communication network via the radiocommunication network and the communication device on a basis of the communication setting information stored in the storage means and controlling the first and second radiocommunication means to transfer data between the external communication network and the host device.

2. The apparatus according to claim 1, wherein the storage means stores therein personal information on a user who operates the host device; and

the communication controlling means uses the communication setting information stored in the storage means and the personal information stored in the personal information storage means to set a relation of connection between the host device and external communication network.

3. The apparatus according to claim 1, wherein the storage means stores therein at least one of PPP (point to point protocol), IP (Internet protocol) and TCP (transport control protocol); and

the communication controlling means uses at least one of the protocols stored in the storage means to set a connection between the host device and external communication network and control the data transfer between the host device and external communication network.

4. The apparatus according to claim 1, wherein the second radiocommunication means connects, via the radiocommunication network, to a mobile communication device having a protocol intended for a connection to a mobile network; and

the communication controlling means sets a relation of connection between the mobile network and host device via the radiocommunication network.

5. The apparatus according to claim 1, wherein the storage means has stored therein a first protocol stack including protocols intended for data transfer to and from the host device, and a second protocol stack including protocols intended for data transfer to and from the communication device;

the first radiocommunication means sends and receives data to and from the host device by the use of the first protocol stack, while the second radiocommunication means sends and receives data to and from the communication device by the use of the second protocol stack; and

the communication controlling means sets a relation of connection between the

external communication network and external communication network by the use of the first and second protocol stacks.

6. The apparatus according to claim 5, wherein the second protocol stack stored in the storage means includes protocols intended for data transfer between the second radiocommunication means and communication device and protocols intended for data transfer between the external communication network and second radiocommunication means via the communication device.

7. A communication method for a communication apparatus which sends and receives data to and from a host device via a radiocommunication network, and to and from a communication device connected to an external communication network outside the radiocommunication network via the radiocommunication network, comprising the steps of:

setting a relation of connection with the external communication network via the communication device by a use of internally stored communication information on the external communication network; and

sending and receiving data to and from the external communication network via the communication device by the use of the relation of connection with the external communication network, while sending and receiving data to and from the host device via the radiocommunication network, thereby controlling the data transfer between the host device and external communication network.

8. The method according to claim 7, further comprising a step of setting a relation

of connection between the host device and the external communication network, by a use of personal information on a user of the host device and communication setting information, both of which are stored in the communication apparatus.

9. The method according to claim 7, further comprising a step of setting a connection between the host device and the external communication network by a use of at least one of PPP (point to point protocol), IP (Internet protocol) and TCP (transport control protocol) stored in the communication apparatus, so as to control data transfer between the host device and the external communication device.

10. The method according to claim 7, further comprising a step of setting a relation of connection between the mobile network and host device via the communication device, by a use of the relation of connection between the communication device and mobile network, set in accordance with a protocol intended for a connection to a mobile network, stored in the communication device.

11. The method according to claim 7, further comprising the steps of:

holding, in the communication device, a first protocol stack including protocols intended for data transfer to and from the host device and a second protocol stack including protocols intended for data transfer to and from the communication device;

sending and receiving data to and from the host device by the use of the first protocol stack, while sending and receiving data to and from the communication device by the use of the second protocol stack; and

setting a relation of connection between the external communication network

and the host device via the radio communication network by the use of the first and second protocol stacks.

12. The method according to claim 11, wherein the second protocol stack includes protocols intended for data transfer between the communication apparatus and communication device, and protocols intended for data transfer between the external communication network and communication apparatus.